SERFF Tracking #: SEFL-129527335 State Tracking #:

State: District of Columbia Filing Company: Assurity Life Insurance Company

TOI/Sub-TOI: H07G Group Health - Specified Disease - Limited Benefit/H07G.001 Critical Illness

Product Name: Grp TL PRO - DI & CI Rates

Project Name/Number: Grp TL PRO - DI & CI Rates/Grp TL PRO - DI & CI Forms

### Filing at a Glance

Company: Assurity Life Insurance Company
Product Name: Grp TL PRO - DI & CI Rates

State: District of Columbia

TOI: H07G Group Health - Specified Disease - Limited Benefit

Sub-TOI: H07G.001 Critical Illness

Filing Type: Rate

Date Submitted: 05/05/2014

SERFF Tr Num: SEFL-129527335

SERFF Status: Assigned

State Tr Num:

State Status:

Co Tr Num: GRP TL PRO - DI & CI RATES

Implementation

Date Requested:

Author(s): Kristi Hendrickson

Reviewer(s): Darniece Shirley (primary), Alula Selassie, John Morgan, Beichen Li

Disposition Date:
Disposition Status:
Implementation Date:

State Filing Description:

SERFF Tracking #: SEFL-129527335 State Tracking #:

State: District of Columbia Filing Company: Assurity Life Insurance Company

TOI/Sub-TOI: H07G Group Health - Specified Disease - Limited Benefit/H07G.001 Critical Illness

Product Name: Grp TL PRO - DI & CI Rates

Project Name/Number: Grp TL PRO - DI & CI Rates/Grp TL PRO - DI & CI Forms

#### **General Information**

Project Name: Grp TL PRO - DI & CI Rates

Status of Filing in Domicile: Authorized

Project Number: Grp TL PRO - DI & CI Forms

Date Approved in Domicile: 11/18/2013

Requested Filing Mode: Review & Approval

Domicile Status Comments: Approved

Explanation for Combination/Other:

Submission Type: New Submission

Group Market Type: Employer

Group Market Type: Employer

Overall Rate Impact:

Filing Status Changed: 05/07/2014

State Status Changed: Deemer Date:

Created By: Kristi Hendrickson Submitted By: Kristi Hendrickson

Corresponding Filing Tracking Number: SEFL-129264690

Filing Description:

Form Numbers - Form Title

R G1310 (DC) – Accident-Only Disability Income Master Rider R G1310C (DC) – Accident-Only Disability Income Certificate Rider

R G1314 (DC) – Critical Illness Master Rider

R G1314C (DC) - Critical Illness Certificate Rider

The rates for the above forms are new that will be available with Term Life Coverage under G L1308 (DC)/ G L1308C (DC) which are currently pending approval under SEFL-129528725.

Forms R G1310 (DC) and R G1310C (DC) (Accident-Only Disability Income Rider) provide for monthly payments if the insured of the base policy is disabled due to an accident.

Form R G1314 (DC) and R G1314C (DC) (Critical Illness Rider) provide a lump sum payment if an insured is diagnosed with a specified critical illness.

### **Company and Contact**

#### **Filing Contact Information**

Kristi Hendrickson, Policy Filing Specialist policyfiling@assurity.com
P.O. Box 82533 402-437-3452 [Phone]
Lincoln, NE 68501-2533 402-437-3802 [FAX]

**Filing Company Information** 

Assurity Life Insurance Company CoCode: 71439 State of Domicile: Nebraska P.O. Box 82533 Group Code: Company Type: Life/Health

Lincoln, NE 68501-2533 Group Name: State ID Number:

(800) 276-7619 ext. [Phone] FEIN Number: 38-1843471

## **Filing Fees**

Fee Required? No Retaliatory? No

Fee Explanation:

SERFF Tracking #: SEFL-129527335 State Tracking #: GRP TL PRO - DI & CI RATES

State: District of Columbia Filing Company: Assurity Life Insurance Company

TOI/Sub-TOI: H07G Group Health - Specified Disease - Limited Benefit/H07G.001 Critical Illness

**Product Name:** Grp TL PRO - DI & CI Rates

Project Name/Number: Grp TL PRO - DI & CI Rates/Grp TL PRO - DI & CI Forms

#### Rate/Rule Schedule

Item No.	Schedule Item Status	Document Name	Affected Form Numbers (Separated with commas)	Rate Action	Rate Action Information	Attachments
1		Appendix I	R G1310 (DC)/R G1310C (DC)	New		Act Memo (DI rider rates only - Group).pdf,
2		Appendix I	R G1314 (DC)/R G1314C (DC)	New		Act Memo (CI rider rates only - Group).pdf,

## Sample Premiums Assurity Life Insurance Company Rider Form R G1310

## Accident-Only Disability Income Rider On and Off-the-Job Accidents Per \$100 of Monthly Benefit

	Annual Premium
6-Month BP	16.24
12-Month BP	21.35

# Premiums Assurity Life Insurance Company Rider Form R G1314

Critical Illness Rider Annual Premiums per \$5,000 Benefit						
Employee EE and EE and Issue Age only Spouse Child Family						
18-39	11.90	23.86	14.98	27.39		
40-49	47.59	96.55	50.97	100.02		
50-59	91.67	188.12	94.98	191.37		
60	149.52	311.01	154.62	314.01		

SERFF Tracking #: SEFL-129527335 State Tracking #: GRP TL PRO - DI & CI RATES

State: District of Columbia Filing Company: Assurity Life Insurance Company

TOI/Sub-TOI: H07G Group Health - Specified Disease - Limited Benefit/H07G.001 Critical Illness

**Product Name:** Grp TL PRO - DI & CI Rates

Project Name/Number: Grp TL PRO - DI & CI Rates/Grp TL PRO - DI & CI Forms

## **Supporting Document Schedules**

Bypassed - Item:	Cover Letter All Filings
Bypass Reason:	n/a
Attachment(s):	
Item Status:	
Status Date:	
Bypassed - Item:	Certificate of Authority to File
Bypass Reason:	n/a
Attachment(s):	
Item Status:	
Status Date:	
Satisfied - Item:	Actuarial Memorandum
	Actuarial Memorandum
Comments:	
Attachment(s):	Act Memo (CI rider - Group).pdf Act Memo (DI rider - Group).pdf
Item Status:	
Status Date:	
Bypassed - Item:	Actuarial Justification
Bypass Reason:	n/a
Attachment(s):	
Item Status:	
Status Date:	
Bypassed - Item:	District of Columbia and Countrywide Loss Ratio Analysis (P&C)
Bypass Reason:	n/a
Attachment(s):	
Item Status:	
Status Date:	
Bypassed - Item:	District of Columbia and Countrywide Experience for the Last 5 Years (P&C)
Bypass Reason:	n/a
Attachment(s):	
Item Status:	

SERFF Tracking #:	SEFL-129527335	State Tracking #:		Company Tracking #:	GRP IL PRO - DI & CIRATES
State:	District of Colum	nbia	Filing Company:	Assurity Life Insura	ance Company
TOI/Sub-TOI:	H07G Group He	ealth - Specified Disease - Limited Be	nefit/H07G.001 Critical Illness		
Product Name:	Grp TL PRO - D	I & CI Rates			
Project Name/Number:	Grp TL PRO - D	II & CI Rates/Grp TL PRO - DI & CI F	Forms		
Status Date:					
Bypassed - Item:	A	Actuarial Memorandum and C	ertifications		
Bypass Reason:	n	n/a			
Attachment(s):					
Item Status:					
Status Date:					
Dominional Roses					
Bypassed - Item:	L	Inified Rate Review Template			
Bypass Reason:	n	n/a			
Attachment(s):					
Item Status:					
Status Date:					

#### ASSURITY LIFE INSURANCE COMPANY

#### **ACTUARIAL MEMORANDUM**

#### CRITICAL ILLNESS RIDER

#### Rider Form R G1314

#### **PURPOSE AND SCOPE**

The purpose of this filing is to demonstrate that the anticipated loss ratio for this Critical Illness rider meets applicable statutory requirements and to provide documentation of actuarial methods and assumptions used in pricing this rider. This filing may not be appropriate for other purposes.

Appendix 1 presents sample annual premiums for this rider.

#### **DESCRIPTION OF BENEFITS**

The following benefit summary outlines the coverage provided by the Rider Form R G1314.

Assurity Life Insurance Company Critical Illness Rider R G1314 Benefit Summary						
Category Specific Critical Illness Percentage of Benefit Amount Percentage  Percentage of Benefit Amount Percentage  Critical Illness Category						
Category 1	Heart Attack	100%	100%			
Catogory :	Stroke	100%	]			
Category 2	Invasive Cancer	100%	100%			
Category 2	Cancer in Situ	25% (payable once per lifetime)	10076			

This description of benefits is only a summary and is not intended to describe all benefits in full detail. It does not detail policy exclusions, limitations or other related provisions. See the rider form for a full description.

#### **RENEWABILITY**

This rider is guaranteed renewable to age 70.

#### **APPLICABILITY**

The sample premiums in this filing are for the Critical Illness rider. This is a new rider form.

#### **MORBIDITY BASIS**

Claim costs were developed by issue age based on the prescribed benefits and frequencies developed from several sources including the American Heart Association, the Medstat database, several state hospital inpatient and ambulatory data bases, the *American Journal of Cardiology*, *Post Graduate Medicine*, *Cardiology*, Cancer Facts, Milliman *Health Cost Guidelines*, and company experience.

Milliman's MG-ALFA pricing and actuarial projection model was used to develop and test gross premiums based on the present values of premiums, expenses, and commissions using a 5.5% annual discount rate. Key assumptions are listed below.

Adjustments were made as necessary to population data in certain instances. For example, population rates of heart attacks and strokes were adjusted to reflect the first diagnosis of such conditions only. Since heart attack and stroke are in the same benefit category, an adjustment was made to reduce the incidence for those that have both a heart attack and a stroke. Exposure adjustments were made to prevent re-exposing someone who is diagnosed with a condition within a benefit category from being exposed to that same condition again. First occurrence rates for invasive cancer and breast cancer were based on 2000 – 2003 Surveillance Epidemiology and End Results (SEER) data. The SEER data is more current than the 1985 NAIC tables and shows higher incidence rates at older ages than the 1985 NAIC tables. At younger ages the 1985 table incidence rates appear much too high as compared to the historical SEER data over several decades. A comparison of the SEER data to the 1985 NAIC tables is shown in the following table.

Invasive Cancer Incidence Rates per 100,000									
		M	ale			Female			
Age	1985 NAIC	'73 – '74 SEER	'92 – '93 SEER	'00 – '03 SEER	1985 NAIC	'73 – '74 SEER	'92 – '93 SEER	'00 – '03 SEER	
0 – 14	NA	14.2	14.8	15.8	NA	11.4	13.0	14.1	
14 – 34	59.9	31.1	45.7	40.0	143.3	42.7	48.4	54.0	
35 – 44	141.5	103.5	141.5	117.1	340.6	216.0	209.4	213.8	
45 – 54	404.5	337.7	390.4	391.8	587.1	496.0	494.6	484.5	
55 – 64	992.6	898.0	1,250.7	1,224.9	953.0	849.6	916.6	927.1	
65 – 74	1,882.8	1,868.2	2,926.9	2,567.4	1,270.7	1,161.3	1,475.7	1,501.0	
75+	2,450.9	2,896.3	3,893.0	3,263.2	1,532.5	1,510.8	1,909.4	1,941.3	

#### **MORTALITY AND PERSISTENCY**

Mortality is based on '75-'80 ultimate mortality tables and lapses are assumed to be 35%, 27%, 20%, 15%, 11%, and 10% for policy years 1, 2, 3, 4, 5, and 6+, respectively.

#### **EXPENSES**

- a. Commissions: 70% first year, 2% thereafter
- b. Expenses as a Percent of Premium: 4%
- c. Expenses as a Percent of Claims: 4%
- d. Expenses Per Policy: \$30 first year, \$15 thereafter increasing at 3% per year

ACTUARIAL MEMORANDUM Rider Form R G1314 September 27, 2013 Page 3

#### **MARKETING**

This rider will be sold through agents to employers and employees at an employer's worksite.

#### **UNDERWRITING**

The rider is offered with very minimal underwriting, so the selection factor is 1.0 in all policy years.

#### **PREMIUM CLASSES**

Premiums for Rider Form R G1314 are based on assumptions listed in the 'Distribution of Business' section of this memorandum. These premiums vary by age bracket and type of contract (employee, spouse, single parent, or family). Premiums are based on issue age.

#### **ISSUE AGE RANGE**

This rider is available to qualified applicants age 18-60.

#### **AREA FACTORS**

Premium rates for this rider do not vary by area.

#### **AVERAGE ANNUAL PREMIUM**

The average annual premium per rider is estimated to be \$60.

#### PREMIUM MODALIZATION RULES

Appendix 1 shows sample annual premiums. Other modes of premium are available including, but not limited to, quarterly, semi-annual, monthly, bi-weekly and weekly. There is no surcharge for premium modes other than annual.

#### **CLAIM LIABILITY AND RESERVES**

Since this is a new rider, there are no claim liabilities and reserves to consider.

#### **ACTIVE LIFE RESERVES**

For premium development, policy reserves are based on ultimate claim costs used in pricing, 1980 CSO mortality 50/50 male/female, 4% interest and a two year preliminary term basis. For valuation purposes, reserves at least as great as the statutory minimum basis will be used.

#### **NET INVESTMENT EARNINGS RATE**

The annual net investment earnings rate is assumed to be 5.5% in all years. This rate is used to earn interest on unearned premium, active life and claim reserves and as a discount rate to determine present values.

#### TREND ASSUMPTION

Since the benefits are fixed, no trend assumption was used in claim costs for premium development.

#### **MINIMUM LOSS RATIO**

The minimum loss ratio is 55% for individual guaranteed renewable Critical Illness forms.

#### **ANTICIPATED LOSS RATIO**

Based on a projection of financial results for the policy forms covered by this memorandum, covering the period from date of issue over the policy lifetime, the anticipated loss ratio of 60.8% is expected to exceed the minimum 55%. Loss ratio as used here means the ratio of the present value of paid claims to the present value of premiums received with present values taken over the life of the policy.

#### **DISTRIBUTION OF BUSINESS**

Issue Age Distribution	Pivotal Age	Distribution
18-39	28	56%
40-49	45	22%
50-60	54	22%

Member Distribution	Distribution
Employee	60%
Spouse	15%
Parent	15%
Family	10%

Average Benefit	
\$6,250	

ACTUARIAL MEMORANDUM Rider Form R G1314 September 27, 2013 Page 5

#### **CONTINGENCY AND RISK MARGIN**

A 10% of premium contingency and risk margin is assumed.

#### **ACTUARIAL CERTIFICATION**

I, Jason L. Damme, am an actuary at Assurity Life Insurance Company, and am a member of the American Academy of Actuaries and meet its Qualification Standards for Statements of Actuarial Opinion.

In my opinion, to the best of my knowledge and judgment the benefits provided are reasonable in relation to the proposed premiums. Based on a projection of financial results for the rider form covered by this memorandum, covering the period from date of issue over the policy lifetime, the anticipated loss ratio of 60.8% will exceed the minimum loss ratio of 55%. Loss ratio as used here means the ratio of the present value of paid claims to the present value of premiums received with present values taken over the life of the policy.

The actuarial methods, considerations, and analyses used in forming my opinion conform to the appropriate Standards of Practice as promulgated by the Actuarial Standards Board, whose standards form the basis of this statement of opinion.

Jason L. Damme, FSA, MAAA

<u>September 27, 2013</u>

Date

Associate Actuary, Product Management Assurity Life Insurance Company

# Premiums Assurity Life Insurance Company Rider Form R G1314

Critical Illness Rider Annual Premiums per \$5,000 Benefit						
Employee EE and EE and Issue Age only Spouse Child Family						
18-39	11.90	23.86	14.98	27.39		
40-49	47.59	96.55	50.97	100.02		
50-59	91.67	188.12	94.98	191.37		
60	149.52	311.01	154.62	314.01		

#### ASSURITY LIFE INSURANCE COMPANY

#### ACTUARIAL MEMORANDUM

#### ACCIDENT-ONLY DISABILITY INCOME RIDER

#### Rider Form R G1310

#### **PURPOSE AND SCOPE**

The purpose of this filing is to demonstrate that the anticipated loss ratio for this Disability Income rider meets applicable statutory requirements and to provide documentation of actuarial methods and assumptions used in pricing this rider. This filing may not be appropriate for other purposes.

Appendix 1 presents sample annual premiums for this rider.

#### **DESCRIPTION OF BENEFITS**

Rider R G1310 provides 24 hour accident-only disability income coverage (on and off the job) with monthly benefit options of \$600 or \$1,200, an elimination period of seven days and benefit periods of either 6 or 12 months for the employee only. See the rider form for a full description of rider exclusions, limitations, and other related provisions.

#### **APPLICABILITY**

The sample premiums in this filing are for the Disability Income rider. This is a new rider form.

#### **MORBIDITY BASIS**

Claim costs were developed by attained age based on the prescribed benefits and accident frequencies developed from several sources including Injury Facts 2000 Edition, state hospital inpatient and ambulatory bases which identified injury codes, and the Milliman 2005 *Health Cost Guidelines*.

Milliman's MG-ALFA pricing and actuarial projection model was used to develop and test gross premiums based on the present values of premiums, expenses, and commissions using a 5.5% annual discount rate. Key assumptions are listed below.

#### MORTALITY AND PERSISTENCY

Mortality is based on '75 - '80 ultimate mortality tables and lapses are assumed to be 25%, 20%, 16.5%, 13%, 11%, and 10% for policy years 1, 2, 3, 4, 5, and 6+, respectively.

#### **EXPENSES**

- a. Commissions: 70% first year, 2% thereafter
- b. Expenses as a Percent of Premium: 4%
- c. Expenses as a Percent of Claims: 4%
- d. Expenses Per Policy: \$30 first year, \$15 thereafter increasing at 3% per year

#### **MARKETING**

This rider will be sold through agents to employers and employees at an employer's worksite.

#### **UNDERWRITING**

There is minimal underwriting because the rider covers disability due to accidents only.

#### **PREMIUM CLASSES**

Premiums for the Accident-Only Disability Rider Form R G1310 (24 hour) vary by benefit period and monthly benefit.

#### **ISSUE AGE RANGE**

This rider can be issued to qualified applicants age 18-60.

#### **AREA FACTORS**

Premium rates for this rider do not vary by area.

#### **AVERAGE ANNUAL PREMIUM**

The average annual premium per rider is estimated to be \$158.

#### PREMIUM MODALIZATION RULES

Appendix 1 shows sample annual premiums. Other modes of premium are available including, but not limited to, quarterly, semi-annual, monthly, bi-weekly, and weekly. There is no surcharge for premium modes other than annual.

ACTUARIAL MEMORANDUM Rider Form R G1310 September 27, 2013 Page 3

#### **CLAIM LIABILITY AND RESERVES**

Since this is a new rider, there are no claim liabilities and reserves to consider.

#### **ACTIVE LIFE RESERVES**

For premium development, policy reserves are based on ultimate claim costs used in pricing, 1980 CSO mortality 50 / 50 male / female, 4% interest, and a two year preliminary term basis. For valuation purposes, reserves at least as great as the statutory minimum basis will be used.

#### **NET INVESTMENT EARNINGS RATE**

The annual net investment earnings rate is assumed to be 5.5% in all years. This rate is used to earn interest on unearned premium, active life and claim reserves, and as a discount rate to determine present values.

#### TREND ASSUMPTION

Since the benefits are fixed, no trend assumption was used in claim costs for premium development.

#### **ANTICIPATED LOSS RATIO**

Based on a projection of financial results for the policy forms covered by this memorandum, covering the period from date of issue over the policy lifetime, the anticipated loss ratio of 68.8% will exceed the minimum loss ratio of 50%. Loss ratio as used here means the ratio of the present value of paid claims to the present value of premiums received with present values taken over the life of the policy.

#### **DISTRIBUTION OF BUSINESS**

Issue Age Distribution	Pivotal Age	Distribution
18 - 24	22	10%
25 - 29	27	13%
30 - 34	32	12%
35 - 39	37	11%
40 - 44	42	14%
45 - 49	47	15%
50 - 54	52	14%
55 – 60	57	11%
Composite	42	100.0%

Other Distributions		
Female	50.0%	
Male	50.0%	
\$600 Benefit	50.0%	
\$1,200 Benefit	50.0%	
6-month Benefit Period	75.0%	
12-month Benefit Period	25.0%	

#### **CONTINGENCY AND RISK MARGIN**

A 10% of premium contingency and risk margin is assumed.

#### **SAMPLE ANNUAL CLAIM COSTS**

Accident-Only Disability Income Rider On and Off-the-Job Accidents Per \$100 of Monthly Benefit 6 month Benefit Period		
Age at Disability	Male	Female
22	\$14.12	\$9.18
32	\$14.43	\$9.73
42	\$12.84	\$9.83
52	\$11.40	\$10.07
62	\$9.67	\$10.65

ACTUARIAL MEMORANDUM Rider Form R G1310 September 27, 2013 Page 5

#### **ACTUARIAL CERTIFICATION**

I, Jason L. Damme, am an actuary at Assurity Life Insurance Company, and am a member of the American Academy of Actuaries and meet its Qualification Standards for Statements of Actuarial Opinion.

In my opinion, to the best of my knowledge and judgment the benefits provided are reasonable in relation to the proposed premiums. Based on a projection of financial results for the rider form covered by this memorandum, covering the period from date of issue over the policy lifetime, the anticipated loss ratio of 68.8% will exceed the minimum loss ratio of 50%. Loss ratio as used here means the ratio of the present value of paid claims to the present value of premiums received with present values taken over the life of the policy.

The actuarial methods, considerations, and analyses used in forming my opinion conform to the appropriate Standards of Practice as promulgated by the Actuarial Standards Board, whose standards form the basis of this statement of opinion.

Jason I Damme ESA MAAA

September 27, 2013

Date

Associate Actuary, Product Management Assurity Life Insurance Company

## Sample Premiums Assurity Life Insurance Company Rider Form R G1310

## Accident-Only Disability Income Rider On and Off-the-Job Accidents Per \$100 of Monthly Benefit

	Annual Premium	
6-Month BP	16.24	
12-Month BP	21.35	